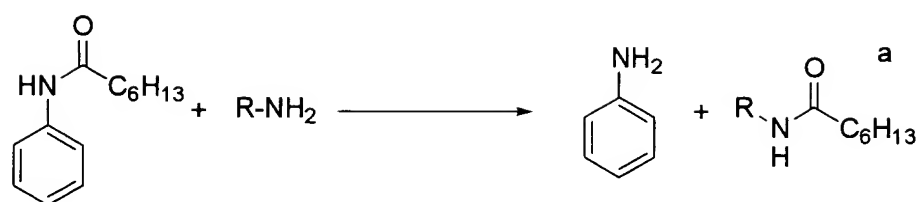
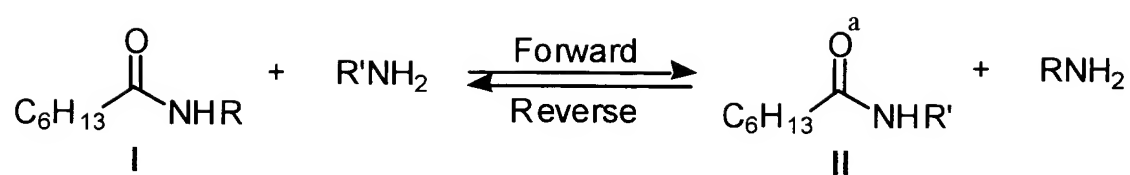


FIG. 1



	Amine	Catalyst	% Yield ^b
1		Sc(OTf) ₃ Ti(NMe ₂) ₄	97 99 (80)
2		Sc(OTf) ₃ Ti(NMe ₂) ₄	98 (79) 88
3		Sc(OTf) ₃ Ti(NMe ₂) ₄	68 98 (84 ^c)
4		Sc(OTf) ₃ Ti(NMe ₂) ₄	99 (98) 2

FIG. 2









			Amide Ratio (I/II) ^b		
	R	R'	Catalyst	Forward	Reverse
1			Sc(OTf) ₃	89/11	6/94
			Ti(NMe ₂) ₄	92/8	5/95
			Al₂(NMe₂)₆	50/50	49/51
2			Al₂(NMe₂)₆	46/54	44/56
3			Al₂(NMe₂)₆	57/43	55/45

FIG. 3

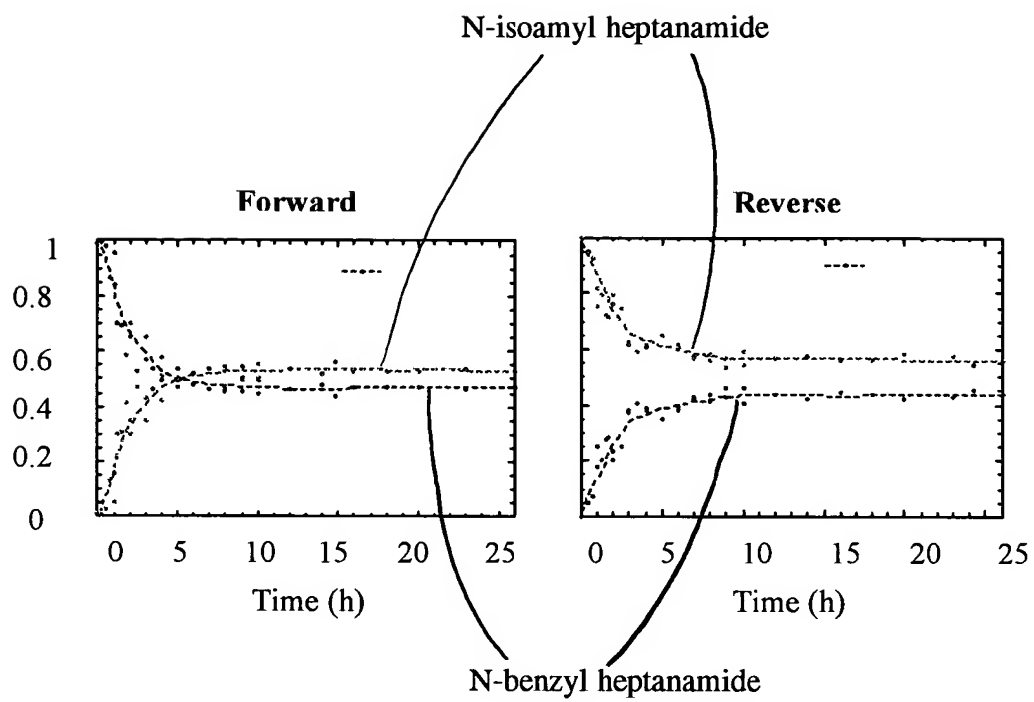
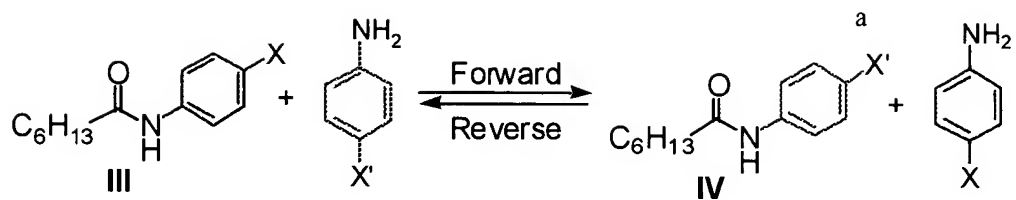


FIG. 4



				Amide Ratio (III/IV) ^b	
	X	X'	Catalyst	Forward	Reverse
1	H	CH ₃	$\text{Sc}(\text{OTf})_3$	98/2	1/99
			$\text{Ti}(\text{NMe}_2)_4$	42/58	42/58
			$\text{Al}_2(\text{NMe}_2)_6$	65/35	43/57
2	H	CH ₃ O	$\text{Ti}(\text{NMe}_2)_4$	34/66	32/68
3	CH ₃	CH ₃ O	$\text{Ti}(\text{NMe}_2)_4$	40/60	41/59

FIG. 5

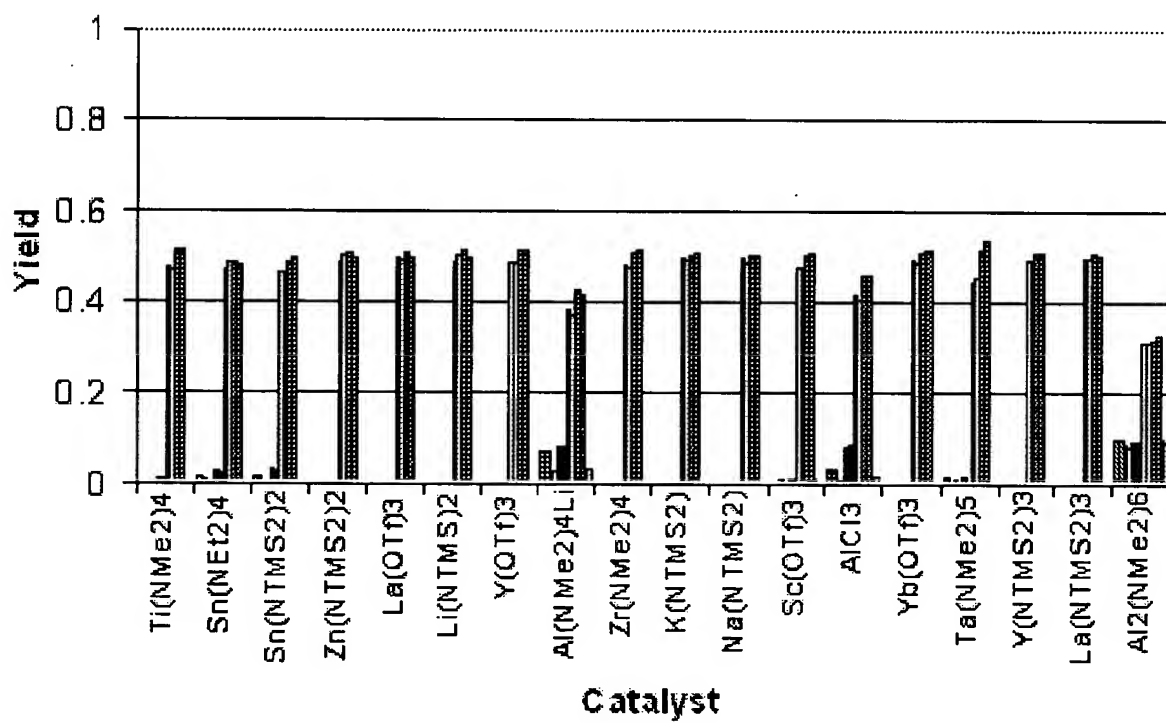
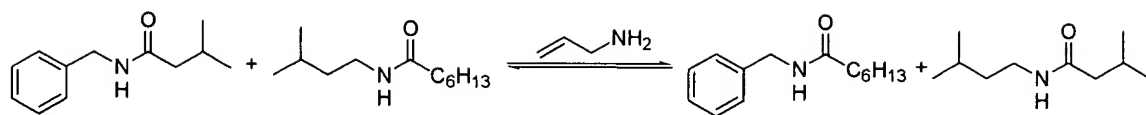


FIG. 6